

Amendments to the Specification:

Please replace the paragraph beginning on page 4, line 16 with the following paragraph:

The array of molecules can be screened for biological activity in a variety of different formats (*e.g.*, libraries of soluble molecules, libraries of compounds tethered to resin beads, fibers, silica chips, or other solid supports). The fabrication of polynucleotide arrays on a solid substrate, and methods of use of the arrays in different assays, are described in US Patent Numbers: 5,143,854, 5,242,979, 5,252,743, 5,324,663, 5,384,261, 5,405,783, 5,412,087, 5,424,186, 5,445,934, 5,451,683, 5,482,867, 5,489,678, 5,491,074, 5,510,270, 5,527,681, 5,550,215, 5,571,639, 5,593,839, 5,599,695, 5,624,711, 5,631,734, 5,677,195, 5,744,101, 5,744,305, 5,744,992, 5,753,788, 5,770,456, 5,831,070, 5,856,011, 6,040,138 and 6,040,193 all of which are incorporated by reference herein in their entireties for all purposes. See also, US Serial Nos. No. 09/079,324, US Patent No. 6,269,846 09/122,216, and PCT Application WO US99/00730 each of which is incorporated by reference herein in its entirety for all purposes. Preferred arrays contemplated by the presently claimed invention have the probe densities as described in the above referenced patents. For example, the '305 patent discloses 100, 400, 1,000 and 10,000 probes/cm<sup>2</sup>.

Please replace the paragraph beginning on page 9 line 8 with the following paragraph:

In one embodiment of the invention, the sequences of the presently claimed invention are tag-probes attached to a solid support. Methods of immobilizing presynthesized sequences and synthesizing sequences *de novo* on solid supports are known. See for example, US Patent Numbers: 5,143,854, 5,242,979, 5,252,743, 5,324,663, 5,384,261, 5,405,783, 5,412,087, 5,424,186, 5,445,934, 5,451,683, 5,482,867, 5,489,678, 5,491,074, 5,510,270, 5,527,681, 5,550,215, 5,571,639, 5,593,839, 5,599,695, 5,624,711, 5,631,734, 5,677,195, 5,744,101, 5,744,305, 5,753,788, 5,770,456, 5,831,070, 5,856,011, 5,744,992, 6,040,138, 6,040,193, US Serial Nos. No. 09/079,324, US Patent No. 6,269,846 09/122,216, and PCT Application WO US99/00730.

Mar-04-04 06:30pm From-Affymetrix, Inc.

408 731 5392

T-964 P.004 F-222

ATTORNEY DOCKET NO.: 3108.1  
Application Serial No. 09/827,383

Please replace the paragraph beginning on page 10 line 4 with the following paragraph:

In addition to those applications above, the presently claimed sequences are suitable to be employed for any of the methods described in US Patent Application No. ~~6,458,530~~ ~~08/626,285~~ (filed 4/4/96), including as a method of analysis of genomic DNA. For example, as described in the ~~'530 patent~~ ~~'285 application~~, tag arrays may be used to identify the function of identified open reading frames (ORFs) by creating deletion mutants for each ORF and analyzing the resulting deletion mutants under a wide variety of selective conditions.